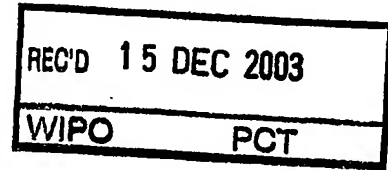


Rec'd PCT/PTO 27 APR 2005



PCT/NZ03/00248



CERTIFICATE

This certificate is issued in support of an application for Patent registration in a country outside New Zealand pursuant to the Patents Act 1953 and the Regulations thereunder.

I hereby certify that annexed is a true copy of the Provisional Specification as filed on 5 November 2002 with an application for Letters Patent number 522453 made by ACCORDO GROUP INTERNATIONAL LIMITED.

Dated 25 November 2003.

PRIORITY DOCUMENT
SUBMITTED OR TRANSMITTED IN
COMPLIANCE WITH
RULE 17.1(a) OR (b)

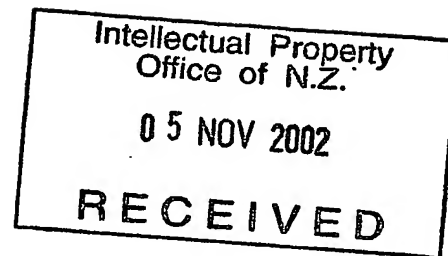
A handwritten signature in cursive script that reads 'Neville Harris'.

Neville Harris
Commissioner of Patents, Trade Marks and Designs



BEST AVAILABLE COPY

522453



Patents Form No. 4

Our Ref: JT218138

Patents Act 1953

PROVISIONAL SPECIFICATION

A METHOD AND SYSTEM FOR MANAGEMENT OF SOFTWARE PRODUCT
LICENCES

We, **ACCORDO GROUP INTERNATIONAL LIMITED**, a New Zealand company, of Suite 3, 532 Parnell Road, Parnell, Auckland, New Zealand do hereby declare this invention to be described in the following statement:

PT0472330

A METHOD AND SYSTEM FOR MANAGEMENT OF SOFTWARE PRODUCT LICENCES

Field of Invention

5

The present invention relates to a method and system for management of software product licences. More particularly, but not exclusively, the present invention relates to a method and system for analysing data about licensed software products to assess compliance.

10

Background to the Invention

Mass-market software products are often licensed to the user rather than sold outright. A licence can specify ways in which the product may be used, for how long, and other rights that may be available to the user – such as a right to future upgrades. Where the licensee is an organisation the licence may specify how many users are allowed to use the software product or across how many workstations the software product may be deployed.

20 In the last ten years it has become difficult for IT managers of organisations to manage software product licence compliance issues due to the multitude and complexity of different licence types available from the vendor and the varying types of licences for software products currently deployed in their organisation.

25 The different types of licences include *volume licences* - which are generally obtained from a reseller and are commercial licence agreements covering a specified number of workstations, servers or users; *OEM licences* - which come with software bundled with hardware obtained from a hardware supplier; and *FPP (Fully Packaged Product) licences* - which come with software purchased boxed with media and manuals.

30 Volume licences are generally recorded on the vendor's main database, but most OEM and FPP licences do not have compulsory registration requirements and consequently information about such licensees are not immediately available to the vendor.

35 Furthermore, there are a number of different types of volume licences. For example MICROSOFT™ software product volume licences include Standard licences which

- licence the use of a specific version of a product and Upgrade licences which replace entitlement to a specific version with entitlement to a later version. Maintenance contracts may be purchased to provide additional upgrade rights for a fixed time period, typically two years. The licenses covered by the contract earn automatic
- 5 upgrades to any new versions released during the period of cover. In addition, MICROSOFT™ has different types of volume agreements, known as Enterprise, Select and Open Agreements. The type of agreement suitable for a particular organisation will depend on the size of the organisation, its commitment to Microsoft product use, and also its ability to forecast purchase volumes. Enterprise Agreements are
- 10 appropriate for medium to large organisations that deploy Microsoft products on each desktop. Select Agreements also suit medium to large organisations, but allow for variable levels of usage within that organisation. Open Agreements can be used by organisations of any size, but typically suit small to medium sized organisations.
- 15 Furthermore, resellers of software products require an easy-to-use system which provides them with a way to offer customers licensing options customised to the customers' business.

In addition, vendors, such as MICROSOFT™, lack a comprehensive system which can

20 analyse sales of volume licences to particular customers integrated with what they know about the customer's organisation, especially in relation to the estimated number of computer workstations and servers, and with the existence of other licences owned by the customer. Such analysis can be helpful in identifying compliance issues with customers and identifying marketing opportunities.

25 Presently, vendors are either required to regularly undertake audits of customers' systems to ensure compliance (report-based) or to rely on the customer to comply with the licence agreement (honesty-based). The disadvantage of the first option is cost and the disadvantage of the second is, as stated, IT managers may not even be aware

30 that they are not in compliance with the licence. Some reports place the figure of unlicensed software used in business at 26%.

One known system for analysing software product licence data is a system of EXCEL™ spreadsheets and macros used to analyse data from the MICROSOFT™

35 volume licence sales database.

This system has a number of disadvantages. Firstly, it only covers volume licence sales which will give an imperfect view of customer compliance. Secondly, it is difficult to interpret and determine how different licence types combine to create an actual license ownership position. And thirdly, it has poor capacity to record and integrate
5 information recovered from the customer.

Summary of the Invention

It is an object of the present invention to provide a method and system for
10 management of software product licences which resolve the above issues or to at least provide the public with a useful choice.

Data Flow Method

According to a first aspect of the invention there is provided a method of analysing software product licence data including the steps of:

- 5 i) receiving the data from a sales database;
- ii) collating the data into an analysis database; and
- iii) displaying an analysis of the data using the analysis database.

Preferably, the sales database is the database of a software product's vendor. The
10 data from the sales database may include transaction data about volume licence sales to customers. The data may also include pricelists of available software products.

In a preferred embodiment of the invention the data is received from a vendor sales database in a batch feed. The batch feed may occur on a monthly, bi-weekly, or
15 weekly basis.

Preferably, data received from the sales database is cleaned before it is collated into the analysis database. Cleaning the data may include correcting inconsistencies in transaction data – such as duplicate agreements, or inconsistencies with the existing
20 analysis database – such as differing master agreement end-dates. If the data includes pricelists then cleaning the data may include determining new products from the pricelist and updating the analysis database accordingly.

Preferably, the method includes the step of interacting with the customers of the
25 vendor to obtain correct customer data, other licence data, and actual software installation data. This data may be incorporated into the analysis database. This step may be the method of the fifth aspect (described below).

The data analysis may include an assessment of licence ownership and an
30 assessment of licence compliance.

Preferably, the data analysis is displayed on a GUI.

The method may include the step of transmitting corrected customer data to a vendor
35 CRM database.

Method for the Graphical Display of Ownership and Compliance

According to a second aspect of the invention there is provided a method of displaying an analysis of software product licence data including the steps of:

- 5 i) displaying an assessment of the number of computer users in an organisation using a first graphical characteristic; and
- ii) displaying the current number of software product licences owned by the organisation for products of a vendor using a second graphical characteristic.

10

Preferably, the second graphical characteristic consists of bars representing each product and the first graphical characteristic is a line, perpendicular to the direction of the bars, overlaid on the bars. The bars may be colour-coded to indicate the different types of licenses. Where a number of licences are owned by the organisation for one
15 software product the bar may be coded the colour of the numerically dominant licence type and the other licences may be represented as smaller bars overlaid on this bar.

Licence Ownership Position (LOP) Workbench

According to a third aspect of the invention there is provided a method of displaying a licence ownership position for a vendor's software products for a customer including the steps of:

- i) retrieving software product licensing data from a sales database;
- ii) retrieving other software product licence data from the customer;
- iii) retrieving assessed use of the software products by the customer;
- iv) calculating a licence ownership position; and
- v) displaying the licence ownership position and assumptions about calculations in a GUI.

A licence ownership position (LOP) is an assessment of the customer's licensing compliance arrived at by taking all available data which may include the number – or estimated number – of computer users in the customer's organisation, the number of commercial licences sold to the customer, the relationship between base licenses, upgrade licenses, and licences accrued via maintenance contracts, other licences owned by the customer – for example OEM and FPP licences, and various assumptions, and calculating how many effective software licences the organisation has.

The licence ownership position may be calculated by combining different licence types and aggregating purchases totals.

Preferably, the method retrieves the data from the analysis database created using the first aspect of the invention.

Preferably, the sales database is the sales database of the vendor.

The method may include the step of calculating and displaying the risk of non-compliance. This may occur with comparison to actual installation data or actual/estimated computer user data.

The licence ownership position may be recorded and may be used when later LOPs are calculated.

The estimated licensing position may be refined by providing more data or more reliable data.

Agreement Modelling

According to a fourth aspect of the invention there is provided a method of determining software product licensing schemes for a customer including the steps of:

- 5 i) retrieving data from an analysis database created in the first aspect;
- ii) retrieving customer requirement data; and
- iii) calculating possible licence schemes.

10 The data retrieved from the analysis database may include current compliance or non-compliance with licensing schemes by the customer, and data about existing software product licences owned by the customer.

15 The customer requirement data may include intended deployment of software products over a specified time (for example the next 3 to 5 years) and "soft cost" data relating to administration costs of certain types of licensing schemes.

The licence schemes may include total costs, annual costs, and net-present-value considerations. Costs may include intangible costs such as cost of administration, audits, etc.

20

The method may include the step of displaying a graphical comparison of the licence schemes.

25 The method may select the best possible or most appropriate licensing schemes for the customer.

Call Center Workbench

According to a fifth aspect of the invention there is provided a method of recording customer data including the steps of:

- 5 i) prompting questions to ask a customer;
 - ii) recording the responses given by the customer; and
 - iii) integrating the answers into the analysis database of the first aspect of the invention.
- 10 The questions may include questions relating to software users within the customer's organisation, general details about the organisation – for example organisation name, address, and details of subsidiaries. The questions may also include questions designed to assist the capture of anecdotal information about product use, user counts, and non-volume licence purchases.

15 The types of questions prompted may be determined by the lack of certain data, the existence of certain data, or the reliability of certain data within the analysis database.

Responses provided may automatically update the analysis database and further
20 questions may be based on responses previously supplied.

The method may include the step of retrieving compliance/non-compliance data from the analysis database. This data may be used to direct the focus of the questions prompted.

Method for Selecting a Software Product Version

According to a sixth aspect of the invention there is provided a method for selecting a software product of a vendor including the sequentially occurring steps of:

- 5 i) displaying a plurality of panes within a GUI;
- ii) selecting a product type from a list of product types under category headings within a first pane;
- iii) selecting a product variation from a list of product variations within a second pane; and
- 10 iv) selecting a product version from a list of product versions within a third pane.

The software products may comply with MICROSOFT™ labelling methodology.

- The first pane may list the vendor's most popular product types under each category.
- 15 Preferably, the category headings under the first pane include "Applications", "Servers", and "Systems".

The method may also include the step of selecting a licence type of the software product within the third pane.

20

The selection of a product type within the first pane may determine the product variations listed in the second pane. Selection of the product type may be confirmed by actuation of a button within the first pane.

- 25 The selection of a product variation within the second pane may determine the product versions listed in the third pane. Selection of the product variation may be confirmed by actuation of a button within the second pane.

- 30 The method may be used to record or update actual installation data of the software product in a customer's organisation.

Method for Linking Parent-Child Company Names

According to a seventh aspect of the invention there is provided a method for linking two company names including the steps of:

- 5 i) entering a first company name abbreviation in a first region;
- ii) populating a first list within a second region with company names which
 correspond to the first company name abbreviation;
- iii) selecting a first company name from the list;
- iv) entering a second company name abbreviation in a third region;
- 10 v) populating a second list within a fourth region of company names which
 correspond to the second company name abbreviation;
- vi) selecting a second company name from the second list; and
- vii) linking the first company name with the second company name.
- 15 Preferably, the company names are linked because the first company name is the
 parent or child of the second company name, the first company name is the former or
 present name of the second company name, or the first company name is an
 alternative name of the second company name.
- 20 The first and second company name abbreviations may be a search string for a part of
 a company name.

The first and second lists may include the company name and its "link status" – i.e. *not linked, a parent, a child*.

Method for Displaying Company Name Parent-Child Links

According to an eighth aspect of the invention there is provided a method for displaying linked company names including the steps of:

- 5 i) displaying a list of one or more primary company names;
- ii) displaying under each primary company name one or more secondary company names linked to the primary company name; and
- 10 iii) displaying one or more graphical characteristics each representing the link between each secondary company name and its corresponding primary company name.

Preferably, the company names are linked because the primary company name is the parent of the secondary company name, the secondary company name is the former name of the primary company name, or the secondary company name is an
15 alternative name of the primary company name.

Preferably, the secondary company is displayed under and indented with respect to the primary company name.

20 The method may include the steps of displaying one or more tertiary company names each linked to a secondary company name under their respective secondary company names and one or more graphical characteristics representing each link.

Preferably, the graphical characteristics used to represent the link are "L-shaped"
25 branches.

Systems for Implementing the Methods

According to a ninth aspect of the invention there is provided a system for implementing the method of any one of the first to eighth aspects of the invention.

5

Software for Effecting the Methods

According to a further aspect of the invention there is provided software for effecting any one of the preceding methods.

Brief Description of the Drawings

The invention will now be described by way of example with reference to the accompanying drawings in which:

5

Figure 1: shows a flow diagram illustrating a preferred embodiment of the method of the first aspect.

10

Figure 2: shows a screenshot illustrating the analysis tools available.

Figure 3: shows a screenshot illustrating an overview of an organisation's licence compliance.

15

Figure 4: shows a screenshot illustrating a summary of licence ownership and compliance.

Figures 5, 6, 8, and 10: show screenshots illustrating different ways of viewing data stored in the analysis database.

20

Figures 7 and 9: show screenshots illustrating a process for selecting a software product version and licence type.

Figures 11 to 13: show screenshots illustrating a method of prompting questions to be asked of a software product licence customer.

25

Figures 14 to 17: show screenshots illustrating a method of displaying and specifying links between different company names.

30

Figures 18 to 21: show spreadsheets illustrating the various aspects of agreement modelling.

Figure 22: shows a flow diagram illustrating a preferred embodiment of the method of the third aspect.

35

Detailed Description of Preferred Embodiments

The present invention relates to a method and system for managing software product licences.

Data Flow Method

5

Referring to Figure 1, a preferred embodiment of the first aspect of the invention will be described.

The central MICROSOFT™ Sales Database provides a monthly batch feed of transaction data. It will be appreciated that the feed may be provided bi-weekly, weekly, or in any time period. The MS Sales Database typically records volume licence transactions recorded by MICROSOFT™ when it sells the licence or transmitted to MICROSOFT™ by a reseller when it sells the licence.

15 It will be appreciated that the sales database of any software product vendor may be used.

The data is scrubbed (cleaned) by a series of processes. Some or all of these processes may be automated. These processes can include correcting inconsistencies in transaction data – such as duplicate agreements, or inconsistencies with the existing analysis database – such as differing master agreement end-dates. The result of these processes is Clean Transaction Data which is provided to update the analysis database represented by a series of tables – customer data, agreement data, transaction data, reseller data.

25

The MICROSOFT™ Sales Database also provides a monthly pricelist of current software products. This may include licence information. This pricelist is scrubbed by a series of processes, of which some or all may be automated. The result of the scrubbing process is a list of new products or changes to existing products. This information is consolidated into the product data table which also forms part of the analysis database.

Interaction with the customer can occur. This interaction can be directed by the call center workbench (see the **call center workbench** section). This interaction may provide the following results:

35

- It may be revealed that the customer is associated with another company name in the analysis database. This association can be a parent-subsidary relationship with the other company or it may be that other company name is a former name, other name, or erroneous recordal of the customer's actual name. In any case this association can have ramifications in relation to licence data recorded against it. The associations may be recorded using the parent-child links method (see the **method for linking parent-child company names** section).
- It may be revealed that customer has acquired other licences such as OEM licences or FPP (Fully Packaged Product) licences which may not be initially recorded in the analysis database. The customer may also have acquired volume licences by acquisition of another company. (see the **method for entering other licence data** section for the way in which this other licence data may be recorded or changed).
- Information about how many and the type of software products actually installed in customer's organisation may be revealed by this interaction. (See the **method for entering actual installation data** section for details on how this data may be recorded or changed) This actual installation data may be used to establish a risk of non-compliance (see the **licence ownership position (LOP) workbench** section).

In this example the ownership of licences is assessed. Conclusions reached from this assessment are stored in the ownership table which is part of the analysis database. This assessment is called the licence ownership position (see the **licence ownership position (LOP) workbench** section for details of its calculation).

In this example the compliance of licences is assessed. Data is retrieved from the ownership table representing the licence ownership position. This is compared with data from the installation data table which represents how the software products are actually deployed. The result of this assessment can be the risk of non-compliance. This risk could include the monetary cost of compliance.

In this example customer data retrieved from the customer during interaction may be fed back to the vendor's customer relations management (CRM) database.

35

Analyses Menu

Figure 2 shows a number of different analyses that may be undertaken in relation to the analysis database.

5 Method for the Graphical Display of Ownership and Compliance

Figure 3 shows how data about assessed ownership for a particular customer may be displayed.

- 10 The Key Total Comparison Chart within Figure 3 shows a method of displaying assessed ownership and approximated installation data to allow for an easy assessment of compliance.

- 15 The approximated installation data, in this example, is the estimate (or actual) number of seats in the organisation. This is represented by the green horizontal line 1. It will be appreciated that a similar graphical characteristic may be used.

- 20 The assessed ownership is shown as bars representing the estimated (or actual) licences, for a number of popular software products, owned by the customer. In this example this includes the following MICROSOFT™ products: OFFICE™, WINDOWS NT/WINDOWS 2000™, EXCHANGE SERVER™, SQL SERVER™, PROJECT™, and VISIO™. In this example the following MICROSOFT™ licences are shown: Standard Licence (red) 2, Maintenance Licence (dark red) 3, and Enterprise Licence (green) 4.

- 25 In this example each bar is divided into three thin bars, each smaller bar represents one of the three licences owned by the customer for that software product. The OFFICE™ bar contains a thin red bar 5 of height 100, a thin dark red bar 6 of height 50, and a thin green bar 7 of height zero. The thin bar which is dominant in height determines the colour and height of the thicker bar which sits behind all three thin bars. In this example, the thin red bar 5 dominates in height and therefore the thicker bar 8 is all red and has a height of 100.
- 30

Display of Licence Ownership and Compliance Table

- 35 Figure 4 shows a table displaying licence ownership and compliance data. The table includes an assessment about the cost required to bring the organisation into

compliance.

The Total MS Sales column is computed from the sum of all volume licences owned by the customer for each product version.

5

The Total Owned column is computed from the sum of the Total MS Sales column and other licences owned by the customer (i.e. OEM and FPP licences).

10

The Compliance Status column shows the difference between the Total Owned licences column and the Total Installed licences column (which is created from information recovered from the customer).

A graphical compliance display showing compliance/non-compliance is shown in this example.

15

A final column, Estimated Cost, shows the estimated cost to comply with the licence requirements which is calculated by multiplying the Compliance Status number by a RRP for one licence for the specific software product.

20 **Display of Transaction Data Analysis**

Figure 5 shows a GUI for querying the analysis database to obtain details about transaction data for a particular customer.

25 **Display of Licence Agreement Analysis**

Figure 6 shows a GUI for querying the analysis database to obtain details about historical and current licence agreements for a particular customer.

30 **Method for Entering Other Licence Data**

Figure 7 shows a GUI for entering licence details about a particular MICROSOFT™ software product licence other than volume licences.

35 A first pane, STEP 1 OF 3, is provided from which product type can be selected using a radio button. The product types are categorised under three headings – Applications,

Servers, and Systems. When the NEXT-> button at the bottom of the pane is actuated the next pane updates to show the available product variations for that product type.

Within this second pane, STEP 2 OF 3, a product variation may be selected from a list using a radio button. When the NEXT-> button at the bottom of this second pane is

5 actuated the next pane updates to show details about that product variation. Within this third pane, FINAL STEP, the following selections can be made: product version, licence type, method of licence acquisition, and whether the proof of the licence acquisition has been confirmed. In addition, data about how many licences have been acquired can be entered.

10

When the RECORD DATA button at the bottom of the third pane is actuated the details entered in the third pane will be recorded in the analysis database, following a confirmation step in which the user is prompted to correct any inconsistent data entries or supply required fields that have been left blank.

15

Display of Other Licence Analysis

Figure 8 shows a GUI for querying the analysis database to obtain details about licences acquired by means other than volume licence purchases for a particular

20

Method for Entering Actual Installation Data

Figure 9 shows a GUI for entering actual customer installation data about a particular

25

MICROSOFT™ software product.

This GUI operates in the substantially similar way to the GUI described under the **method for entering other licence data** however, the details provided within the third pane include the number of software products actually installed rather than the types

30

of licences owned.

This data may also be recorded in the analysis database .

Display of Reseller Analysis

35

Figure 10 shows a GUI for querying the analysis database to obtain details about

resellers of the vendor's software products.

Call Center Workbench

- 5 There is a need to support people engaged in outbound calling, particularly in the area of compliance reviews and auditing. At all stages of this activity, the need for ready access to reliable, informative information about the customer's purchasing history is a key success factor in terms of revenue generation and customer satisfaction.
- 10 The aim of this method is to integrate scripting functionality and provide links to other sections of the invention.

The method will facilitate the capturing of key organizational data, anecdotal information about product use, user counts, and non-volume license purchases.

15

In summary, the call center workbench provides prompts to assist a call centre operator in interaction with a customer to obtain information about the customer's organisation.

- 20 Figures 11 to 13 show how the call center workbench operates.

This method provides questions which a call center operator can use to query customers to establish details about the customer's organisation.

- 25 The questions include:

- general organisation details such as name and address
- primary contact details
- end user device profile to determine the number and types of computing devices within the organisation
- 30 - use of standard products such as a typical desktop configuration
- general product use to indicate the level of use of popular products
- details about the network infrastructure
- EXCHANGE™ and OUTLOOK™ mail systems
- SQL Applications and Intranet details
- 35 - use of terminal server
- typical windows desktop O/S

- licence transcript
- growth forecast
- future projects to be undertaken
- preferred purchasing method including preferred reseller used
- 5 - summary notes about impending licenses

In this example, the method provides for detailed questions about other licences acquired to be asked and recorded using the **method for entering other licence data** (shown in Figure 11 under Record Other Purchases).

10

The method can also provide for detailed questions about actual installation data to be asked and recorded using the **method for entering actual installation data**.

- 15 In this example, the method provides for questions about associated company names to be asked and recorded using the **method for linking parent-child company names** (shown in Figure 11 under Included (Child) Organisations).

The responses are recorded and integrated into the analysis database.

20 **Parent-Child Company Name Links**

Figures 14 to 17 show screenshots of how company name links can be viewed, registered, or removed.

- 25 Figure 14 provides a menu to three options: view all existing customer links, register a new customer link, and register a link removal.

Method for Displaying Company Name Parent-Child Links

- 30 Figure 15 shows how a list of customers and their links may be viewed.

In the example, Biolab Scientific Limited has three child company names. These are indicated as child company names by displaying them indented under the parent name. In addition a graphical characteristic, namely, an "L-shaped" branch points from the ID of parent name to the ID of child company name. It will appreciated that other graphical characteristics may be used.

35

In the example, Abbott Laboratories Nz Limited (ABNZ) has two children. One of the children – ABBOTT INTERNATIONAL (AI) – has itself a child – Abbott Laboratories (AL). This child (AL) of a child is displayed in relation to its parent (AI) in the same way
 5 that its parent (AI) is displayed in relation to that parent's parent (ABNZ).

The list also displays whether the link is active or not, who registered the link, and the date of registration.

10 Method for Linking Parent-Child Company Names

Figure 16 shows how company names can be linked.

This example provides the ability to search for a parent company name by part of the name within the "Search for a Parent" pane. A search mode may also be selected, for
 15 example: starts with the *part* of the name entered or contains the *part* of the name entered.

The example also provides the ability to search for a proposed child company name by
 20 the same method within the "Search for a Child" pane.

When the "Search for Parent" button is actuated the parent list box in the "Choose a Parent" pane is populated with company names that match the search characteristics specified.
 25

A parent company name may be selected from the parent list box.

When the "Search for Child" button is actuated the child list box in the "Choose a Child" pane is populated with company names that match the search characteristics
 30 specified.

A proposed child company name may be selected from the child list box. When the "Review Link" button is actuated the screen shown in Figure 17 appears and parent company name and proposed child company name may be linked.
 35

Referring to Figure 17, there are a number of different types of links that may be

made. The child company name may be a variation of the parent name, a subsidiary company of the parent company, or a former company name of the parent company.

Agreement Modelling

5

Numerous medium and large sized customer organizations require help to structure new licensing agreements particularly MICROSOFT™ licensing agreements. The aim of this method is to build the sophisticated functionality of a modelling tool as part of the invention.

10

The agreement modelling method can undertake the following functions:

- a) an ability to capture the customer's "licensing roadmap" - i.e. their intended deployment of MICROSOFT™ products over the next 3-5 years;
- b) the modelling of various relevant agreement options, showing total costs, annual costs, net-present-value considerations etc - with appropriate graphical comparisons;
- c) the incorporation of the current LOP, as calculated by the **licence ownership position (LOP) workbook**. Any current non-compliance is factored into the various agreement options, and offset where appropriate.
- d) a facility to capture and incorporate "intangible" costs, such as cost of administration, audit etc;
- e) production of summary information and tables to support a recommendation for future action.

15

20

25 The agreement modelling method can calculate a customer's licensing options in relation to a vendor such as MICROSOFT™ by:

- comparing Open Business, Open Volume, Select and Enterprise;
- factoring in any international agreements options;
- calculating appropriate levels for the individual pools;
- 30 • providing annual year by year cost estimates;
- factoring in NPV calculations;
- providing the ability to capture and quantify some of the "soft" costs involved in administering licensing agreements to get a "real" reflection of the total cost of an agreement.

35

Figures 18 to 21 show the various ways in which appropriate licensing schemes for a

customer may be calculated, displayed and compared.

Figure 18A shows how an estimated yearly growth of licences required is calculated given the estimated yearly growth of the organisation.

5

Figure 18B shows tables summarising possible licensing schemes for the organisation.

The first table shows the best possible options for the organisation. Each option has a description, a breakdown of costs and a total cost column.

10

The second table, Annual Spend Analysis, shows the cost per year of the licence options.

Figure 19A shows several comparison graphs.

15

The first graph, Annual Spend over 3 Years, displays a cost bar per year for each of the years and for each of the options. In this example, 3 years are shown – the purple bar represents the cost for the first year, the red bar represents the cost for the second year, and the yellow bar represents the cost for the third year.

20

The second graph, Three Year Spend, displays yearly costs using bars for various agreement options..

The graphs enable easy visual comparisons to be made between the various licensing schemes (options).

25

Figure 19B shows a table of the outstanding licences that are required to be purchased.

30

Figure 20A shows a table and graph of the "soft" (e.g.administration, audit etc) costs after they have been weighted.

Figure 20B shows a table which serves as a worksheet for the recording and calculation of administration, audit, and other "soft" costs.

35

Figure 21 shows an example of the calculation table for one of the agreement options, with products, purchase quantities and costs spread over a four year period.

Licence Ownership Position (LOP) Workbench

5

The **display of licence ownership and compliance table** method and **method for the graphical display of ownership and compliance** provide an LOP which is calculated by a series of algorithms, the aim being to offset upgrade licenses against available base licenses, apply maintenance transactions against base licenses etc.

- 10 These algorithms are automatic and based on a set of rules and assumptions. However sophisticated these rules and assumptions may be, there are still instances where, as a result of contact with the customer, the rules and assumptions are seen to be providing a misleading or erroneous view of the actual license ownership position.

- 15 The method for generating the LOP provides the following functions:

- a) display the automatically generated LOP, showing how transactions have been offset against each other;
- b) manually apply information acquired through customer interaction, or other sources, to modify the standard calculation and create a new LOP;
- 20 c) store, retrieve and further refine this modified LOP until it represents the best possible analysis of that customer's ownership position;
- d) if a standard or derived LOP is accepted as a definitive ownership position by MICROSOFT™ and the customer, establish this LOP in the system as a confirmed position. This means that all future LOP calculations will take this
- 25 confirmed position as the starting point for subsequent LOP calculations.

Referring to Figure 22, the LOP workbench extracts licence purchase history from the Analysed Data (the analysis database) and calculates a system generated LOP.

- 30 Previously calculated and recorded LOPs may also be used to calculate the system generated LOP.

The LOP can undergo a process of refinement which could include any number of the following steps:

- 35 • The LOP may be displayed and modified by the user to provide additional, updated, or more reliable data. The Updated LOP can be recorded.

- The customer or reseller can be queried to obtain additional, updated, or more reliable data. The Refined LOP can be recorded.
 - With the consent of the customer and the vendor, in this example MICROSOFT, the method can establish a confirmed and dated LOP. The recorded LOP may be
- 5 flagged as confirmed as at a specified date.

In this example the data is provided from an analysis database created by the **data flow method**. It will be appreciated that the data may be retrieved from another source such as directly from the vendor database or from a third party source.

10

Review History

One of the primary aims of the invention is to assist people who interact with customers to review license compliance. This may be through call center activity,

15 targeted on-site review activity, or other means. The various views and reports provided by the system give tools and raw material with which to perform this activity. As the work proceeds, new information will be uncovered, and the invention also aims to provide places for such relevant information to be stored, and, where appropriate, incorporated into future activity.

20

The purpose of the Review History section of the system is to allow the results and notes from previous engagements to be retrieved and reviewed before a fresh activity is undertaken.

25 For example, in New Zealand, numerous customer compliance reviews have been performed. In the course of this activity substantial information has been gathered which would be of great help to anyone embarking on future activity.

The intent of this method is to house this historical data for easy reference, and to

30 provide a facility for the capture of new information as it is gathered.

Report on Customers

The aim of this section is to provide reporting options, specifically relating to the

35 customer view.

This includes individual customer reports, such as a purchase summary, and also

reports on all or part of the customer base.

Customer Administration

- 5 This section is used to manage customer information which is not specifically derived from the MS Sales data. It is only available to people whose login grants appropriate permissions.

One of the most important customer administration functions is the creation and maintenance of parent-child links between customers. Anyone who has worked with

- 10 MS Sales data will know that there is a large amount of duplication in terms of customer names and customer identifiers. For the system to coherently display analysed information pertaining to a customer, the appropriate links to transactions entered under a variation of the name must be in place.

- However, wrongly created links are just as bad as missing links, so the establishment of links is restricted to appropriately authorised people. Anyone using the system will have the ability to propose a parent-child link, but not to activate it. A person with appropriate permissions must review the proposed link and decide whether it is to be activated or not.

- There are a range of other administrative functions in the same category, such as the maintenance of seat count information, segment classification etc.

Reseller Analysis

- The Reseller Profile screen provides a list of resellers from which summary information regarding any chosen reseller can be viewed. This summary information provides a graphical analysis of the activity of this reseller against broad criteria, such as agreement types and product pools.

- The aim of this Reseller Analysis section is to provide much more detailed and in-depth analysis of resellers. Examples include:

- a) the performance of a specific reseller across a particular product, group of products, or combination of products;
- b) identification of the best and/or worst performing resellers against certain criteria. The criteria could relate to products, segments, agreement types, or some combination of these categories;

- c) Comparisons can be made between similarly categorised resellers, as well as against the whole reseller population.

- The advantage of this analysis tool is that a vendor such as MICROSOFT™ can provide their reseller community with significant enhanced value in being able to get a view of their customers licensing history in a format that is easily understood and can easily be worked with. For Large Account Resellers (LARs), access to any customers for whom they hold Select or Enterprise contracts will be immediately available. This will include the ability to view all license purchases for this customer (including Open). For resellers with Open customers, an authority request process with approval being gained from the customer prior to the information being made available will ensure resellers get access to only the information relevant to that customer and for a limited period of time.

15 **Product Reports**

The aim of this section is to provide reporting options, specifically relating to the reseller view.

- 20 This includes individual reseller reports, and also reports on all or part of the reseller population.

Reseller Administration

- 25 This section is used to manage reseller information which is not specifically derived from the MS Sales data. It is only available to people whose login grants appropriate permissions.

- 30 As with customers, the most important function is the creation and maintenance of parent-child links between reseller organisations which have been entered under different names, merged, or combined in some way. This is vital to ensure a coherent and representative view of the data pertaining to resellers.

Product List

35

The aim of this screen is to provide a searchable list of product information, as it

pertains to MS Sales activity.

This list includes information such as product family name, version, release date, transaction types, part description, part number etc. The release dates have been gathered from a variety of sources and are as accurate as we have been able to make them. Where accurate information has not been available, we have used a best estimate.

It is also intended that this list give access to an estimated RRP for products in the current price list, and to an estimated replacement cost for obsolete products. The idea of an estimated replacement cost is to be able to gauge the value of non-compliant software.

Product Profile

The aim of this section is to provide graphical and tabular analysis of how a product, group of products, or combination of products have been purchased over a given time period. Purchases can be categorised according to a variety of criteria, including date range, transaction type (e.g. uptake of maintenance), upgrades versus standard purchase etc.

This section differs from the "Product Analysis" section of the Sales & Marketing View in that it relates to products in their own right - whereas the Sales & Marketing View provides product activity from a customer, reseller, segment, and agreement perspective.

Product Reports

The aim of this section is to provide reporting options, specifically relating to the product view.

This includes individual product reports, and also reports on groups or families of products.

Product Licensing Rules

In working with these tools and using them to analyse compliance and other licensing situations, it is often necessary to look up the literature on how a particular product is licensed. This information can be hard to find. Even harder to find is the set of rules

that related to previous versions of a product - i.e. how it was licensed in the past. And yet, this information can have a significant bearing on a customer's current licensing position.

The aim of this section is to provide a repository of the principal licensing rules, 5 -searchable by product. Where possible, previous rules will also be referenced. The intention is that this repository will evolve over time, and when the rules change, as they frequently do, the previous set will not be lost, but retained for future reference. It is also intended to provide links to the rules from appropriate parts of the invention, so that they can be easily accessed while other work is being carried out.

10

Customer Segment Analysis

This section will provide graphical and tabular analysis of how the various customer segments (currently Major, Corporate, Upper Mid-Market, Core Mid-Market, and Small 15 Business) have purchased according to MS Sales transaction records. It will allow comparisons showing which customer segments have purchased various products, agreement types, and maintenance contracts, over what periods, in what volumes etc.

Agreement Analysis

20

This section will provide graphical and tabular analysis of how the various agreement types (Enterprise, Select, Open) have been utilised, according to MS Sales transaction records. It will track the utilisation of these agreement types against the various customer segments, product families etc.

25

Product Analysis

This section will provide graphical and tabular analysis of how the various products, families of products, and combinations of products have been purchased, according to 30 MS Sales transaction records. Comparisons can be made according to customer segment, agreement type, and also within given timeframes.

One of the primary features is the ability to produce a list of customers who have or have not purchased various products or product combinations. These extracts can be 35 categorized by customer size, segment etc.

Simple examples could include:

- a) list all Corporate customers who have purchased Windows 2000 Server, but not Exchange Server;
- b) list all Core Mid-Market customers with a predominance of Windows NT 4.0;
- 5 c) list all Select customers who have little or no Software Assurance cover for desktop operating systems;
- d) list all Major customers who have purchased some SQL Server but no SQL CALs;

10 Reseller Access

The intent of this module is to facilitate access to various areas of the invention for certain nominated and approved resellers. Participating resellers would be restricted to viewing information about those customers by whom authority has been
15 granted. This authority is effectively already in place for Large Account Resellers, but would need to be explicitly obtained for Open customers.

The rationale behind providing this facility is that a better informed and better-equipped reseller channel will be more effective in securing licensing revenue in the
20 first instance, and also of converting existing non-compliance to revenue.

Customer Access

The invention has the potential to provide an interface for individual customers, and
25 thereby provide them with a coherent and comprehensive view of their volume license history, as well as analyzed interpretations and areas for investigation. An interface with an on-line audit tool can be incorporated to capture installation information with the customer's permission, and combine with the LOP to provide a picture of the customer's compliance status.

30

ADVANTAGES OF THE INVENTION

The invention can be used to provide internal MICROSOFT™ users with analysed views of customer, product, and reseller activity based on volume license transactions.
35 With the capacity to capture other license data together with installation information,

customer organisations can be assessed in terms of license ownership and legal compliance status.

The invention provides the following advantages:

5

From a **customer** perspective, the invention provides the ability to:

- view the customer's licence ownership position based on all license transactions and entitlements (including FPP, OEM, etc. where available);
- be able to capture manual adjustments to the customers licence ownership position (with full audit tracking) to factor in any changes that may be uncovered through interaction with the customer;
- freeze a customer's agreed licensing position (agreed by both MICROSOFT™ and the customer) as at a certain date – this is particularly useful for those customers where some compliance activity is undertaken and a position is finalised. This feature means that subsequent license analysis can commence from this established position, and repeated trawling through historical data can be avoided.;
- produce Estimated License Ownership transcripts for forwarding to the customer - both electronically and in hard copy;
- view customers from a compliance perspective;
- view customers from a technology perspective – what MICROSOFT™ technology they using, and the extent of that use;
- record licenses acquired outside of any MICROSOFT™ Volume Licensing programs (i.e. FPP, OEM, license transfers, technology guarantees, etc.);
- record installation information as it becomes available from the customer;
- view what resellers have been active with this customer, the period of activity, the products transacted, and the transaction volumes;
- identify who is the incumbent reseller (where available);
- create visible, auditable, and reversible parent-child links where multiple MsSales IDs exist for the same organisation;
- estimate seat counts for comparative purposes;
- produce reports such as who has:
 - Upgrade Advantage/Software Assurance expiring;
 - who has volume agreements expiring;
 - who are the most appropriate customers to follow up from a compliance perspective (quantified in dollars);

35

From a **reseller** perspective, the invention provides the ability to:

- create visible, auditable, and reversible parent-child links between resellers (especially useful for viewing and reporting on resellers from both a local office and national perspective);
- categorise resellers based on their activity in certain customer segments;
- additionally assign Influencers (as opposed to fulfilment resellers) to a customer for reporting purposes;
- view resellers and assess how they are performing as compared to either the entire local market or reseller category across a number of comparative factors such as:
 - customer segment;
 - agreement type;
 - product pool;
 - number of transactions;
 - number of licenses per agreement type;
 - average number of licenses sold per transaction;
 - individual products (e.g. how is this reseller performing with SQL as compared to the market generally or it's peers);
- view an individual reseller's transaction activity;
- report on resellers from a customer perspective;
- provide resellers with a list of expiring UA/SA within their customer base, on an as required basis;
- report on top performing resellers using a number of comparative factors such as:
 - customer segment;
 - agreement type;
 - product pool;
 - number of transactions;
 - number of licenses per agreement type;
 - average number of licenses sold per transaction;
 - individual products (e.g. how is this reseller performing with SQL as compared to the market generally or it's peers);

From a **product** perspective, the invention provides the ability to:

- analyse sales performance by product, and report on high/low performing products;
- perform on-line product-customer queries (such as who has NT SERVER™ and is not entitled to WINDOWS 2000 SERVER™; who has WINDOWS SERVER™ but not EXCHANGE SERVER™, etc.)
- and more

A further advantage is that all the information is available ON-LINE and UP-TO-DATE as of the most recent data feed.

Although this invention has been described by way of example it is to be appreciated that improvements and/or modifications may be made thereto without departing from the scope or spirit of the present invention. Furthermore, where known equivalents exist to specific features, such equivalents are incorporated as if specifically referred to in this specification.

ACCORDO GROUP INTERNATIONAL LIMITED

By their attorneys
BALDWIN SHELSTON WATERS

CAT Data Flow - Oct 2002

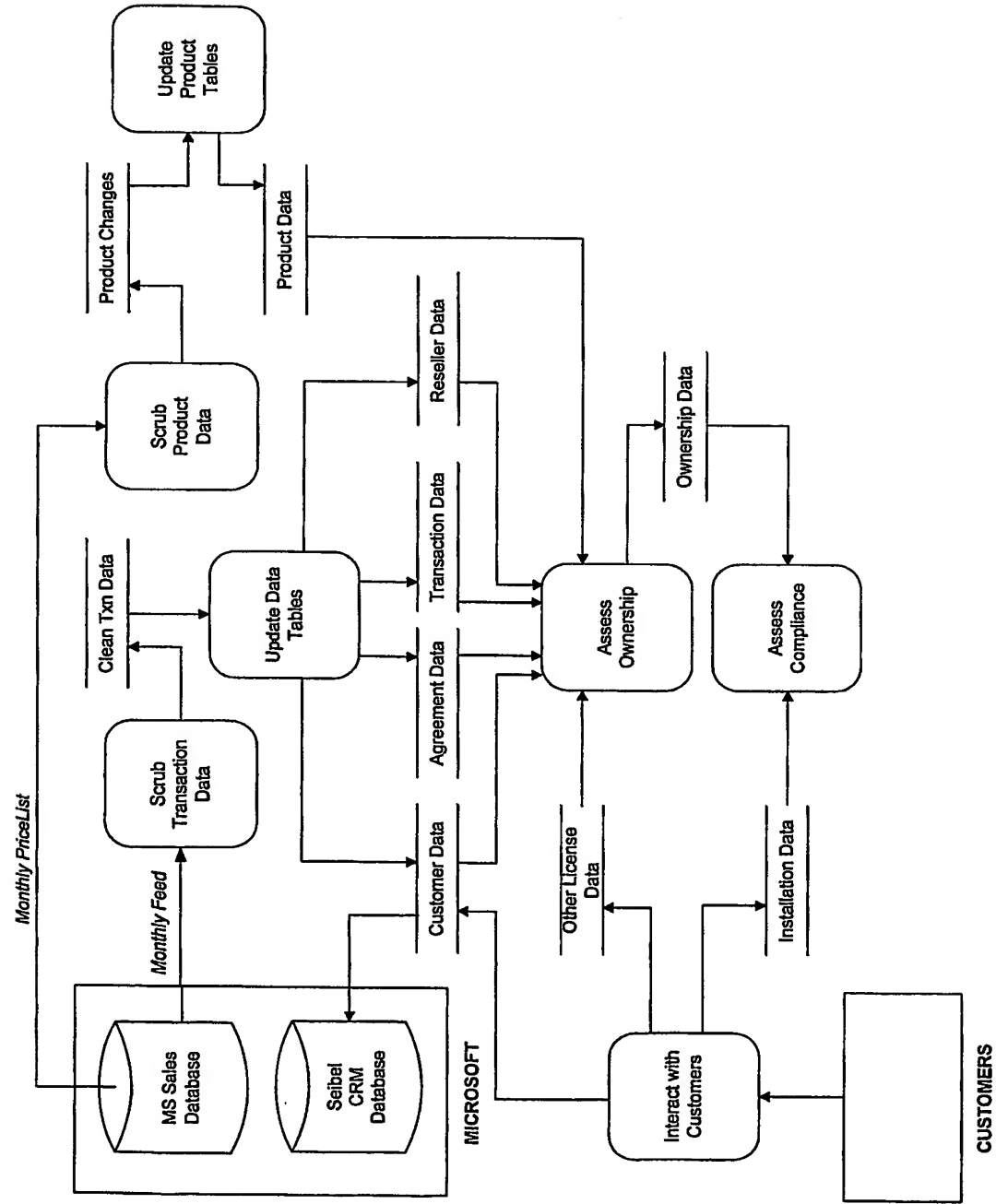


Figure 1

http://www.accord.com/CAT_Test/CAT.asp - Microsoft Internet Explorer

Address: http://www.accord.com/CAT_Test/CAT.asp

COMPLIANCE ANALYSIS TOOLSET 1112147 3M NEW ZEALAND LTD Upper Mid-Market 1 of 104 Choose Customer

Compliance Analysis Toolset Site Map

This Site Map shows the major functions of the CAT system. The Quick Menu displayed to the left provides continuous access to the features activated in this test system. The features listed in the various sections below provide links to active screens in some instances, and in other cases provide a link to a description of how the feature will work when activated.

CUSTOMER VIEW	RESELLER VIEW	SALES & MARKETING VIEW
MS Sales Overview <i>Key indicators from MS sales team</i>	Reseller Overview <i>Key indicators from MS sales team</i>	Customer Segment Analysis <i>Comparative analysis of customer segment by product, agreement type etc</i>
Customer Profile <i>Customer profile from MS sales team</i>	Reseller Analysis <i>In-depth analysis of this reseller</i>	Agreement Analysis <i>Comparative analysis of agreement type by product, segment, reseller etc</i>
Compliance Summary <i>Estimate of compliance position</i>	Reseller Reports <i>Various reports on reseller activity</i>	Product Analysis <i>Comparative analysis of product families by customer segment, agreement type etc</i>
Transaction List <i>Searchable list of all MS sales team</i>	Reseller Administration <i>Linking and other reseller admin</i>	
Agreement List <i>Searchable list of all VPM agreements</i>		
Record Other Licensing <i>Ability to record other licensing (e.g. FPP, OEM)</i>	PRODUCT VIEW	OTHER MODULES
Review Other Licensing <i>Review and edit other licensing entries</i>	Product List <i>Searchable list of products and release dates</i>	Agreement Modelling <i>Tools for capturing customer deployment plans and modelling both agreement options</i>
Record Installation Data <i>Ability to record installation information</i>	Product Profile <i>Analysis of sales for each product or product family</i>	Call Center Workbench <i>Scripts for capturing and displaying information via call center programs</i>
ELP Workbench <i>Modify an effective licensing partition</i>	Product Reports <i>Various reports on product transactions</i>	Reseller Access <i>Ability for Resellers to access data and views for assigned customers</i>
Review History <i>Review previous compliance activity</i>	Product Licensing Rules <i>Summary of licensing rules for a chosen product family</i>	Customer Access <i>Ability for customers to review MS sales transaction analysis</i>
Report on Customers <i>Product various customer reports</i>		
Customer Administration <i>Linking and other customer admin</i>		

Quick Menu

- MS Sales Overview
- Customer Profile
- Compliance Summary
- Transaction List
- Agreement List
- Record Other Licensing
- Review Other Licensing
- Record Installation Data
- ELP Workbench
- Review History
- Report on Customers
- Customer Administration

Figure 2

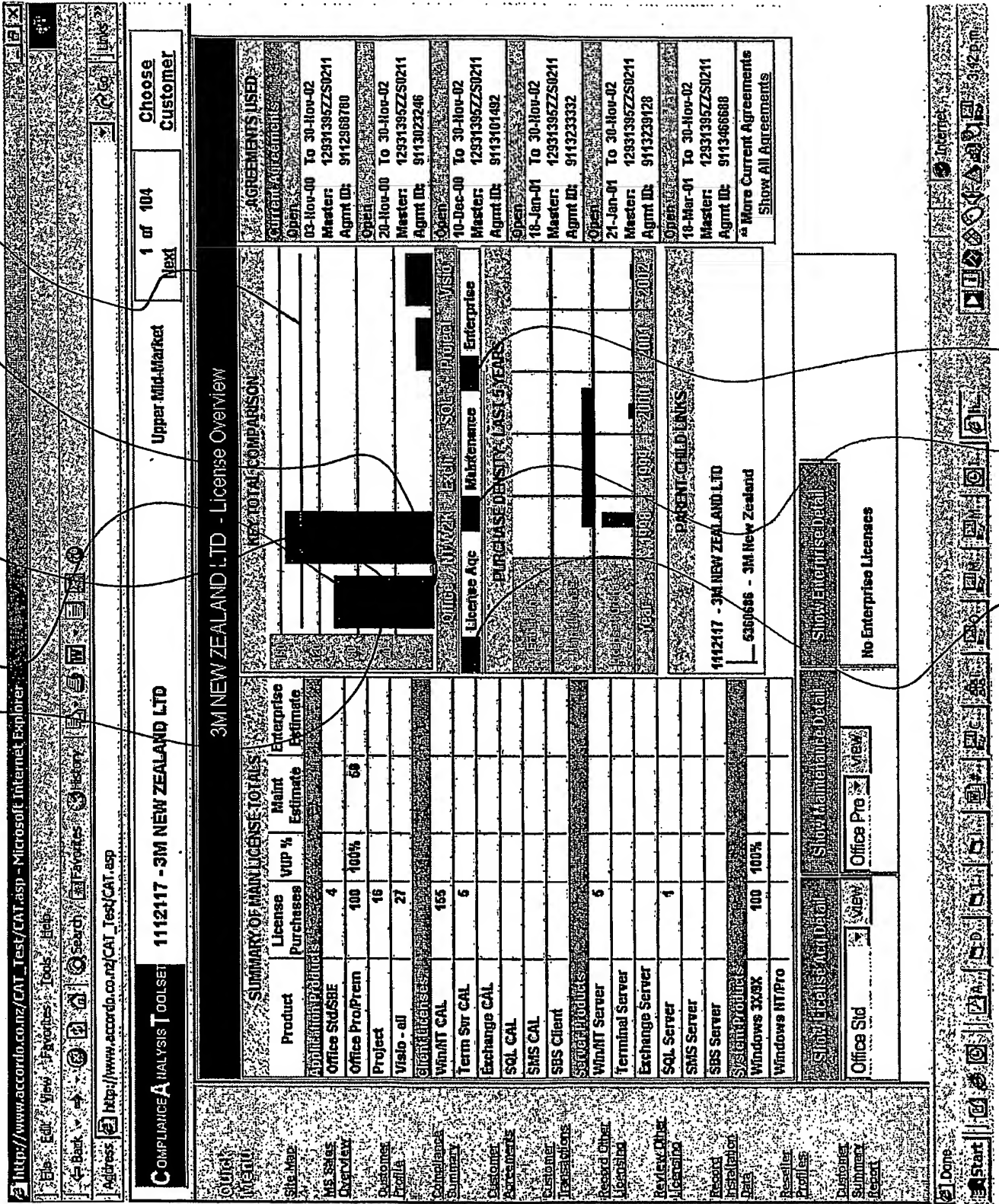


Figure 3

http://www.acord.co.nz/CAT_Test/CAT.asp - Microsoft Internet Explorer

[File](#)
[Edit](#)
[View](#)
[Favorites](#)
[Tools](#)
[Help](#)

[Back](#)
[Forward](#)
[Stop](#)
[Home](#)
[Search](#)
[History](#)

Address: http://www.acord.co.nz/CAT_Test/CAT.asp

COMPLIANCE ANALYSIS TOOLSET
1112117 - 3M NEW ZEALAND LTD

Upper Mid-Market
 1 of 104
 Next
 Choose Customer

[Home](#)
[Start](#)
[End](#)
[Refresh](#)
[Print](#)
[Zoom](#)
[Full Screen](#)

[Done](#)
[Start](#)
[End](#)
[Refresh](#)
[Print](#)
[Zoom](#)
[Full Screen](#)

1112117 - 3M NEW ZEALAND LTD													
LICENSE OWNERSHIP AND COMPLIANCE SUMMARY													
Product	Version	Std Lic	Upd Lic	Maint Accr's	Ent Accr's	Total MS Sales	Other Lic	Total Owned	Total Inst'd	Compl Status	Compliance Display	Est Cost	
Office Pro/Bookshelf Bundle	97			50		50		50	20	30		\$9,500	
Office Professional	7.00		100			100		100	110	-10		\$9,500	
Office Small Business	2000	4				4	6	9	10	-1		\$0	
PowerPoint	2000	4				4		4		4		\$12,924	
Project	2000	16				16		16	24	-18			
Publisher	2000	10				10		10	10	0			
SQL Server Standard Edition	2000	1				1		1	1	0			
Visio Enterprise	2000						2	2		2			
Visio Professional	2000	13				13		13	22	-9		\$7,578	
Visio Professional	2002	3				3		3	6	-3		\$2,526	
Visio Standard	2002	11				11		11	9	2			
Visual FoxPro Professional	5.00	1				1		1	1	0			
Windows 2000 CAL	2000	6				6	10	16	44	-29		\$1,788	
Windows 2000 Professional	2000	5				5	95	99	142	-47		\$18,203	
Windows 2000 Server	2000	5				5		5	5	0			
Windows 2000 Terminal Services CAL	2000	5				5		5	5	0			
Windows 95	95		100			100		100		100			
Windows NT CAL	4.00	150				150		150		150			
Windows XP Professional	XP		2			2		2		2			
Estimated Non-Compliance Cost												\$52,609	

[Home](#)
[Start](#)
[End](#)
[Refresh](#)
[Print](#)
[Zoom](#)
[Full Screen](#)

[Done](#)
[Start](#)
[End](#)
[Refresh](#)
[Print](#)
[Zoom](#)
[Full Screen](#)

Figure 4

http://www.accordo.co.nz/CAT_Test/CAT.asp - Microsoft Internet Explorer

Address: http://www.accordo.co.nz/CAT_Test/CAT.asp

COMPLIANCE ANALYSIS TOOLSET 1112117 - 3M NEW ZEALAND LTD

Upper Mid-Market 1 of 104 Next Choose Customer

1112117 - 3M NEW ZEALAND LTD - All Transaction Data

Customer: [Product] [Program] [Master Agreement] [Show-This] [Reset]

Reseller: [Date From] [Date To] [Transaction Type] [Agreement ID]

Part Desc	Office Pro/Bookshelf Bundle	Non-specific	Upgrade Advantage	50	31-Jul-98	Open
Part Desc: Office Pro/Bookshelf Win32 English Upgrade OLP	Part#: 353-00062	Level: New Open Maintenance	Seg: Upper Mid-Market	Master: 11005776AAS0007	Ag ID: 911019597	Terms: 29-Jul-98 to 31-Jul-00
Address: 250 Archers Road, Takapuna, AUCKLAND						
Reseller: Financial Systems Limited						
Part Desc: Office Professional	7.00	Version Upgrade	100	31-Jan-97	Open	
Part Desc: Office Pro 7.0 Win32 English VUP OLP 8	Part#: 259A050-70LPB	Level: Open Upg	Seg: Upper Mid-Market	Master: 83041025BAS0004	Ag ID: 5783043789	Terms: 30-Jan-97 to 01-Apr-99
Address: 250 Archers Road, Takapuna, AUCKLAND						
Reseller: Financial Systems Limited						
Part Desc: Office Small Business	2000	Standard	4	25-May-01	Open	
Part Desc: Office SB 2000 Win32 English OLP NL	Part#: 588-01288	Level: Open Std	Seg: Upper Mid-Market	Master: 12931395ZZS0241	Ag ID: 9113681083	Terms: 08-May-01 to 30-Nov-02
Address: 250 Archers Road, Takapuna, AUCKLAND						
Reseller: Financial Systems Limited						
Part Desc: PowerPoint	2000	Standard	4	25-May-01	Open	
Part Desc: PowerPoint 2000 Win32 English OLP NL	Part#: 079-01480	Level: Open Std	Seg: Upper Mid-Market	Master: 12931395ZZS0241	Ag ID: 9113681083	Terms: 08-May-01 to 30-Nov-02
Address: 250 Archers Road, Takapuna, AUCKLAND						
Reseller: Financial Systems Limited						
Part Desc: Project	2000	Standard	15	26-May-00	Open	
Part Desc: Project 2000 Win32 English OLP NL	Part#: 076-01257	Level: Open Std	Seg: Upper Mid-Market	Master: 12448566ZZS0205	Ag ID: 9112482051	Terms: 25-May-00 to 31-May-02
Address: 250 Archers Road, Takapuna, AUCKLAND						
Reseller: Financial Systems Limited						
Part Desc: Project	2000	Standard	1	25-Jan-02	Open	
Part Desc: Project 2000 Win32 English OLP NL	Part#: 076-01257	Level: Open Std	Seg: Upper Mid-Market	Master: 12931395ZZS0241	Ag ID: 9112482051	Terms: 25-May-00 to 31-May-02
Address: 250 Archers Road, Takapuna, AUCKLAND						
Reseller: Financial Systems Limited						

Menu: Site Map, MS Sales Overview, Customer Profile, Compliance Summary, Customer Address, Customer Transactions, Record Other, License, Review Other, License, Record Installation Data, Reseller Profiles, Customer Summary Report, Done

Start 3:49 pm

Figure 5

http://www.accordb.co.nz/CAT_Test/CAT.asp - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address http://www.accordb.co.nz/CAT_Test/CAT.asp

C COMPLIANCE ANALYSIS TOOLSET **1112117 - 3M NEW ZEALAND LTD** **Upper Mid-Market** **1 of 104** **Choose Customer**

1112117 - 3M NEW ZEALAND LTD Listing Of All Agreements Used

☒ Hide Detail

Customer Agreement Status Program Master Agreement End Date to Agreement ID

Reseller Start Date from End Date to Agreement ID

OPEN LICENSE - Expired	Master: 83011025BAS9904	Agmt ID: 5F83013799	Start: 30-Jan-97
OPEN LICENSE - Expired	Master: 83011049BSS9904	Agmt ID: 5F83013812	Start: 30-Jan-97
OPEN LICENSE - Expired	Master: 11006766ARS0007	Agmt ID: 9111019594	Start: 29-Jul-98
OPEN LICENSE - Expired	Master: 11006776AAS0007	Agmt ID: 9111019597	Start: 29-Jul-98
OPEN LICENSE - Expired	Master: 83011025BAS9904	Agmt ID: 9111368009	Start: 02-May-99
OPEN LICENSE - Expired	Master: 12448566ZZS0205	Agmt ID: 9112482051	Start: 25-May-00
OPEN LICENSE - Current	Master: 12931395ZZS0211	Agmt ID: 9112968780	Start: 03-Nov-00
OPEN LICENSE - Current	Master: 12931395ZZS0211	Agmt ID: 9113023246	Start: 20-Nov-00
OPEN LICENSE - Current	Master: 12931395ZZS0211	Agmt ID: 9113101492	Start: 10-Dec-00
OPEN LICENSE - Current	Master: 12931395ZZS0211	Agmt ID: 9113233332	Start: 18-Jan-01
OPEN LICENSE - Current	Master: 12931395ZZS0211	Agmt ID: 9113239128	Start: 21-Jan-01
OPEN LICENSE - Current	Master: 12931395ZZS0211	Agmt ID: 9113466688	Start: 18-Mar-01
OPEN LICENSE - Current	Master: 12931395ZZS0211	Agmt ID: 9113486304	Start: 21-Mar-01
OPEN LICENSE - Current	Master: 12931395ZZS0211	Agmt ID: 9113602771	Start: 17-Apr-01
OPEN LICENSE - Current	Master: 12931395ZZS0211	Agmt ID: 9113681083	Start: 08-May-01
OPEN LICENSE - Current (4900110)	Master: 12931395ZZS0211	Agmt ID: 9113954549	Start: 17-Jul-01
OPEN LICENSE - Current	Master: 12931395ZZS0211	Agmt ID: 9114248162	Start: 07-Oct-01

[Home](#) [Start](#) [Back](#) [Forward](#) [Print](#) [Find](#) [Go](#) [Stop](#) [Refresh](#) [Reload](#) [Close](#) [Help](#) [About](#) [Internet Options](#) [Content Advisor](#) [Feeds](#) [History](#) [Favorites](#) [Tools](#) [Help](#)

Done Start Back Forward Print Find Go Stop Refresh Reload Close Help About Internet Options Content Advisor Feeds History Favorites Tools Help

3944 pm

Figure 6

http://www.accardo.co.nz/CAT_Test/CAT.asp - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://www.accardo.co.nz/CAT_Test/CAT.asp

COMPLIANCE ANALYSIS TOOLSET 11121417 - 3M NEW ZEALAND LTD

Upper Mid-Market 1 of 104 Choose Customer

STEP 1 OF 3

SELECT PRODUCT TYPE

Applications

☒ Office
☐ Project
☐ Visio
☐ Languages
☐ Single Applications

SERVERS

☐ NT/Windows
☐ Exchange
☐ SQL
☐ SMS
☐ BackOffice
☐ Terminal Server
☐ Small Business Server
☐ Other Server

SYSTEMS

☐ Windows
☐ Other Systems

STEP 2 OF 3

REFINE SELECTION

Office Variations

☒ Office
☐ Office Mac
☐ Office Small Business
☐ Office Professional
☐ Office Premium
☐ Office Pro Special Edition
☐ Office ProBookshelf
☐ Office ProfessionalMiniPro
☐ Office ProWorkPro
☐ Office Developer

STEP 3 OF 3

SELECT VERSION AND RECORD DETAILS

1. Enter your name (without the company name recorded):
Your name (e.g. John Smith): X

2. Choose version:
Record quantity required and date of acquisition:
Enter quantity: 0 and date: January 2002

3. Select license type:
☒ Standard License
☐ Competitive Upg
☐ Product Upg
☐ Maintenance (original or SA - also need End Date:)
☐ Other (add explanation below)

4. Select Method of license Acquisition:
☒ Full Package Product (FPP)
☐ OEM
☐ License Transfer
☐ Technology Guarantee
☐ Other (add explanation below)

5. Proof of Purchase Confirmation:
☐ Confirmation not signed
☐ Proof of Purchase confirmed

6. Add Explanation/Notes:
RECORD DATA RESET FORM

Figure 7

http://www.accordo.co.nz/CAT_Test/CAT.asp - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: http://www.accordo.co.nz/CAT_Test/CAT.asp

COMPLIANCE ANALYSIS TOOLSET 1112117 - 3M NEW ZEALAND LTD 1 of 104 Choose Customer

Upper Mid-Market Next

1112117 - 3M NEW ZEALAND LTD - All Licenses Acquired by Other Means

Customer: Product: method: Proof of Purchase: apply filter: reset:

enterer: Date From: Date To: License Type:

Customer	Product	Method	Proof of Purchase	Apply Filter	Reset
1112117	Vision Enterprise	2000	Standard License	2	01-Jan-02 Full Package (FPP)
Enterer: WJ (on 23-Oct-02)	Status: Not Confirmed	Notes:			
1112117	Windows 2000 CAL	2000	Standard License	10	01-Jan-02 Full Package (FPP)
Enterer: WJ (on 23-Oct-02)	Status: Not Confirmed	Notes:			

Quick Menu

Site Map

MS-Excel Overview

Customer Profile

Compliance Summary

Customer Agreements

Customer Translations

Record Other Licenses

Review Other Licenses

Record Individual Data

Reseller Profiles

Customer Summary Report

Done Start

3:45 PM

Figure 8

http://www.acordco.co.nz/CAT_Test/CAT.asp - Microsoft Internet Explorer		File Edit View Favorites Tools Help	
Back Forward Stop Search History		Address http://www.acordco.co.nz/CAT_Test/CAT.asp	
COMPLIANCE ANALYSIS TOOLSET		1112117 - 3M NEW ZEALAND LTD	
Upper Mid-Market		1 of 104 Next	
Choose Customer			

FINAL STEP EDIT INSTALLATION QUANTITIES <p>The table shows the selected products and the current recorded installation quantity for each. This quantity can be updated by amending the appropriate entry and pressing the 'UPDATE QUANTITY' button.</p> <table border="1"> <tr> <td>Choose Product Version</td> <td>UPDATE QUANTITY</td> <td>RESET FORM</td> </tr> </table>				Choose Product Version	UPDATE QUANTITY	RESET FORM
Choose Product Version	UPDATE QUANTITY	RESET FORM				

STEP 1 OF 3 SELECT PRODUCT TYPE		STEP 2 OF 3 REFINE SELECTION	
Applications <input type="radio"/> Office <input type="radio"/> Project <input type="radio"/> Visio <input type="radio"/> Languages <input type="radio"/> Single Applications		Office Variations <input type="radio"/> Office <input type="radio"/> Office Mac <input type="radio"/> Office Small Business <input type="radio"/> Office Professional <input type="radio"/> Office Premium <input type="radio"/> Office Pro Special Edition <input type="radio"/> Office ProBookshelf <input type="radio"/> Office ProBookshelf/FoxPro <input type="radio"/> Office Pro/FoxPro <input type="radio"/> Office Developer	
SERVERS <input type="radio"/> NT/Windows <input type="radio"/> Exchange <input type="radio"/> SQL <input type="radio"/> SMS <input type="radio"/> BackOffice <input type="radio"/> Terminal Server <input type="radio"/> Small Business Server <input type="radio"/> Other Server		<input type="button" value="NEXT"/>	
SYSTEMS <input type="radio"/> Windows <input type="radio"/> Other Systems		<input type="button" value="NEXT"/>	

Home Report Site Map MS Sales Overview Customer Profile Compliance Summary Customer Requirements Customized Transactions Report Other Licenses Review Other Licenses Report Installation Data Reseller Profiles Customer Summary Report

Start	Done
-----------------------	----------------------

Figure 9

http://www.accordo.co.nz/CAT_Test/CAT.asp - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites History

Address http://www.accordo.co.nz/CAT_Test/CAT.asp

COMPLIANCE ANALYSIS TOOLSET

Reseller View

Return to Customer View

Group Alphabetically

Show All

Customer Type

Show All

Active From

Jul-96

Search for

display

regd

Show Children

12	4RF COMMUNICATIONS LTD	First Date	29-Dec-00	Last Date	02-Aug-02	Customer Types	CHMM	Total Quotes	1	Total Agmts	17	Product Pools		View Profile
									Open			Apps	Svcs	
65	ADVANCED TECHNOLOGY PARTNERS LTD	First Date	30-Jun-00	Last Date	23-Aug-02	Customer Types	Smb CHMM	Total Quotes	15	Total Agmts	25	Product Pools		View Profile
									Open			Apps	Svcs	Sys
113	AMTEL COMMUNICATIONS LTD	First Date	28-Sep-01	Last Date	28-Sep-01	Customer Types	Smb	Total Quotes	1	Total Agmts	1	Product Pools		View Profile
									Open			Apps	Svcs	Sys
119	Anife NZ Ltd	First Date	27-Aug-99	Last Date	27-Aug-99	Customer Types	CHMM UMMH	Total Quotes	2	Total Agmts	2	Product Pools		View Profile
									Open			Apps	Svcs	
143	Arche Technologies	First Date	01-Jan-99	Last Date	01-Jan-99	Customer Types		Total Quotes	1	Total Agmts	1	Product Pools		View Profile
									Open			Apps	Svcs	
173	ATL Systems (NZ) Ltd	First Date	02-Aug-96	Last Date	23-Aug-02	Customer Types	Smb CHMM UMMH Corp	Total Quotes	92	Total Agmts	246	Product Pools		View Profile
									Open			Apps	Svcs	Sys
202	AXON COMPUTERTIME	First Date	02-Aug-96	Last Date	23-Aug-02	Customer Types	Smb CHMM UMMH Corp	Total Quotes	202	Total Agmts	1058	Product Pools		View Profile
									Open			Apps	Svcs	Sys
247	BJS Industrial Computing	First Date	30-Mar-01	Last Date	25-Jan-02	Customer Types	CHMM	Total Quotes	2	Total Agmts	4	Product Pools		View Profile
									Open			Apps	Svcs	Sys
292	BUSINESS COMPUTERS LTD	First Date	02-Aug-96	Last Date	16-Aug-02	Customer Types	Smb CHMM UMMH Corp	Total Quotes	48	Total Agmts	91	Product Pools		View Profile
									Open			Apps	Svcs	Sys
296	Business Solutions NZ	First Date	04-Jan-99	Last Date	26-Apr-02	Customer Types	Smb CHMM UMMH Corp	Total Quotes	12	Total Agmts	24	Product Pools		View Profile
									Open			Apps	Svcs	Sys

Customer Summary

Customer Details

Customer Transactions

Record Other

License

Review Other

License

Report

Installation

Reseller

Reseller Profiles

Customer Summary

Report

Start

Done

3:46 p.m.

Figure 10

Call center workbench

Microsoft Access - [Call Opening]

File Edit View Insert Format Records Tools Window Help

Type a question for help

Search: Core Medium Business

Cust # Organisation Name 600 Biolab Scientific Limited

CALLER NUMBER

Organisation Details

Amended Organisation Name: Biolab Scientific Limited

Primary Address details: 244 Bush Road, Albany Private Bag 102 922 North Shore Mail Centre

Primary City: AUCKLAND Primary Phone: +64093806700

Call Status Details

Current Call Status: In progress

Record Other Purchases

Other Purchases

Primary Contact Details

First Name: Graham Last Name: Crookes

Phone (M): 0-3-388 6700

Email Address: grahamc@biolab.co.nz

Job Role: IT Manager

Show any Self Data: Self Data

Verified Industry Classification: Marketing Audience

Influence Level

Special Notes

Action - Customer will complete by mid September.

License details and compliance analysis

Press to proceed to customer interview

Log call details

Call Log

Exit

Record any further names here... Add Other Co Names

Included (Child) Organisations

License data included with this orgn: Biolab Scientific

Biolab Scientific NZ Limited

BIOLAB SCIENTIFIC LTD

Record: 1 of 4 4 of 91

Form View

SQL Server Enterprise SQL Server Query A... 2 Microsoft Outlook 4 Microsoft Access EN 3:16 pm

Figure 11

Microsoft Access - [Customer Profiling] File Edit View Insert Format Records Tools Window Help Type a question for help

End User Device Profile

Total devices?

Made up of...

Desktop PCs	<input type="text" value="0"/>	Distributed across	<input type="text" value="0"/>
Notebook PCs	<input type="text" value="0"/>		
Thin Client Devices	<input type="text" value="0"/>		

Add any comment on number of seats...

Use of Standard Products

Do you have a std desktop config?

Which typically go on each device?

Office (any type)	<input checked="" type="checkbox"/>	HT/Win2K CAL	<input checked="" type="checkbox"/>
Exchange	<input checked="" type="checkbox"/>	Outlook	<input checked="" type="checkbox"/>
SMS	<input checked="" type="checkbox"/>	SMA (libel brng)	<input checked="" type="checkbox"/>
Access	<input checked="" type="checkbox"/>	SQL CAL	<input checked="" type="checkbox"/>

If there is a std config, how is it deployed?

General Product Use

For each product, indicate the level of use...

Office Std	<input type="text" value="0"/>	Office Pro	<input type="text" value="0"/>
Project	<input type="text" value="0"/>	Visio	<input type="text" value="0"/>
Access	<input type="text" value="0"/>	Outlook	<input type="text" value="0"/>

Network Infrastructure

What do you use as a network infrastructure?

If NT/Win2000 is not used for file, print etc, is it used as an application server? ☒

If yes, how many users access each NT/Win2000 hosted applications?

Of these, how many would access Windows 2000 Server?

Exchange and Outlook

Is Outlook the primary mail client? ☒

Is Exchange the email medium? ☒

Other Purchases:

SQL Apps and Intranet

Does your org use an intranet? ☒

If yes, what proportion of users have regular access?

If yes, is anything available via Intranet which uses SQL Server (e.g. phone list)?

Is there any other apps e.g. financial/HR packages, which uses SQL? ☒

If yes, please list:

And estimate the number of users accessing SQL in this way

Do you know how the SQL use in these apps is licensed?

Use of Terminal Server

Do any users connect via Terminal Ser (thin clients)?

If yes, approximately how many users connect in this way?

Growth Forecast

How do you expect user numbers to change over the next 1-2 years?

If you expect a change, by what percentage?

Preferred Purchasing Method

If licenses need to be purchased, what is the preferred method?

Preferred Reseller:

Account Manager:

Windows Desktop O/S

Which desktop O/S is standard?

Do you ever buy PCs without Windows Standard? ☒

If yes, where

Records: 14 of 2 (filtered)

Form View

Start SQL Server Ent... SQL Server O... 2 Microsoft... 5 Microsoft... Access Screen... EN 3:18 p.m.

Figure 12

Microsoft Access - [Customer Profiling]

File Edit View Insert Format Window Help

Type a question for help

SMS

Access

If there is a cd config, how is it deployed?

☒ SNA (Host Intgrn)

☒ SQL CAL

Exchange and Outlook

Is Outlook the primary mail client?

Is Exchange the email medium?

License Analysts

Next Page

Do any users connect via Terminal Server (this client)?

If yes, approximately how many users connect in this way?

Other Purchases

Windows Desktop O/S

Which desktop o/s is standard?

Do you ever buy PCs without Windows bundled?

If yes, where from?

Growth Forecast

How do you expect user numbers to change over the next 1-2 years?

If you expect a change, by what percentage?

Future Projects

Do you expect to undertake projects in the next 1-2 years which will impact on MS product usage?

Preferred Purchasing Method

If licenses need to be purchased, what is the preferred method?

Preferred Reseller

Account Manager

Summary Notes

Detail any impending licensing expected

\$-Value of Impendings

Any final notes (for MS consumption)

Other Purchases

Post-call analysis required?

Back to Top

Record: 1 of 2 of 2 (Filtered)

Form View

Start

SQL Server Ent...

SQL Server O...

Microsoft...

Access Screen...

EN

3:48 p.m.

Figure 13

Parent-child linking

http://www.accord.co.nz/Project_MS/CAT.asp

File Edit View Favorites Tools Help

Address http://www.accord.co.nz/Project_MS/CAT.asp

COMPLIANCE ANALYSIS TOOLSET

4252468 - 121 AGENT DOT COM LTD

Small Business

1 of 8888
Next

Choose Customer

Customer Linking

Main Menu

1. View all existing customer links

You can enter a character string in the search box to narrow down the list. The list will contain all links where the parent or child name contains the search string (this search is case-sensitive).

Search String:

View Links

2. Register a new customer link

This will take you to a page where you can select parent and child customers to form a new customer link. The link will not be activated until checked by an administrator - typically within 24 hours.

Register a Link

3. Register a link removal

This will take you to a page where you can select an existing link and request its removal. The link removal will not be activated until checked by an administrator - typically within 24 hours. You can enter a character string in the search box to narrow down the list. The list will contain all links where the parent or child name contains the search string (this search is case-sensitive).

Search String:

Remove a Link

Home

Menu

Site Map

MS Sales Overview

Business Profile

Compliance Summary

Customer Agreements

Customer Transactions

Record Other Headings

Review Other Headings

Record Installation Data

Reseller Profiles

Link Customer

Customer Summary Report

Internet

http://www...

12/15/2001

Figure 14

http://www.accord.co.nz/Project_MS/CAT.asp - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Address http://www.accord.co.nz/Project_MS/CAT.asp Go WebFarra! Choose Customer

1 of 8688 Next

Small Business

4252468 - 121 AGENT DOT COM LTD

Product	Customer	Status	Customer	Next
3082056 - SVENDALA BARMAC	Active	W Jackson	04-Nov-02	
4742575 - Reddeal Limited	Active	W Jackson	04-Nov-02	
1858252 - G.E.C. LTD	Active	W Jackson	04-Nov-02	
4750153 - Biolab Scientific Limited	Active	W Jackson	04-Nov-02	
1620624 - BIOLABS SCIENTIFIC LTD	Active	W Jackson	04-Nov-02	
4649989 - Biolab Scientific NZ Limited	Active	W Jackson	04-Nov-02	
5291412 - Biolab Scientific	Active	W Jackson	04-Nov-02	
4757500 - Phoenix Freight	Active	W Jackson	04-Nov-02	
4187146 - PHOENIX FREIGHT LTD	Active	W Jackson	04-Nov-02	
5070008 - Phoenix Freight Bryan Mortimer	Active	W Jackson	04-Nov-02	
4772010 - Nz Media Group Limited	Active	W Jackson	04-Nov-02	
4799954 - New Zealand Media Group	Active	W Jackson	04-Nov-02	
4782947 - Allianz	Active	W Jackson	04-Nov-02	
2195912 - MIMI NZ	Active	W Jackson	04-Nov-02	
4810729 - Macquarie IT Nz Limited	Active	W Jackson	04-Nov-02	
4938207 - Macquarie IT Limited	Active	W Jackson	04-Nov-02	
4840948 - Fortuna Manning	Active	W Jackson	04-Nov-02	
4945619 - Fortuna Manning Limited	Active	W Jackson	04-Nov-02	
4841035 - Abbott Laboratories Nz Limited	Active	W Jackson	04-Nov-02	
4146240 - ABBOTT INTERNATIONAL	Active	W Jackson	04-Nov-02	
4486636 - Abbott Laboratories	Active	W Jackson	04-Nov-02	
4242781 - ABBOTT LABORATORIES - DIAGNOSTICS DIVISION	Active	W Jackson	04-Nov-02	
4848014 - Moore Wilson	Active	W Jackson	04-Nov-02	
2917462 - MOORE WILSONS AND CO LTD	Active	W Jackson	04-Nov-02	

SQL Server 2000

2 Windows

2 Micros...

Internet

Done

Figure 15

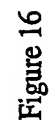


Figure 16

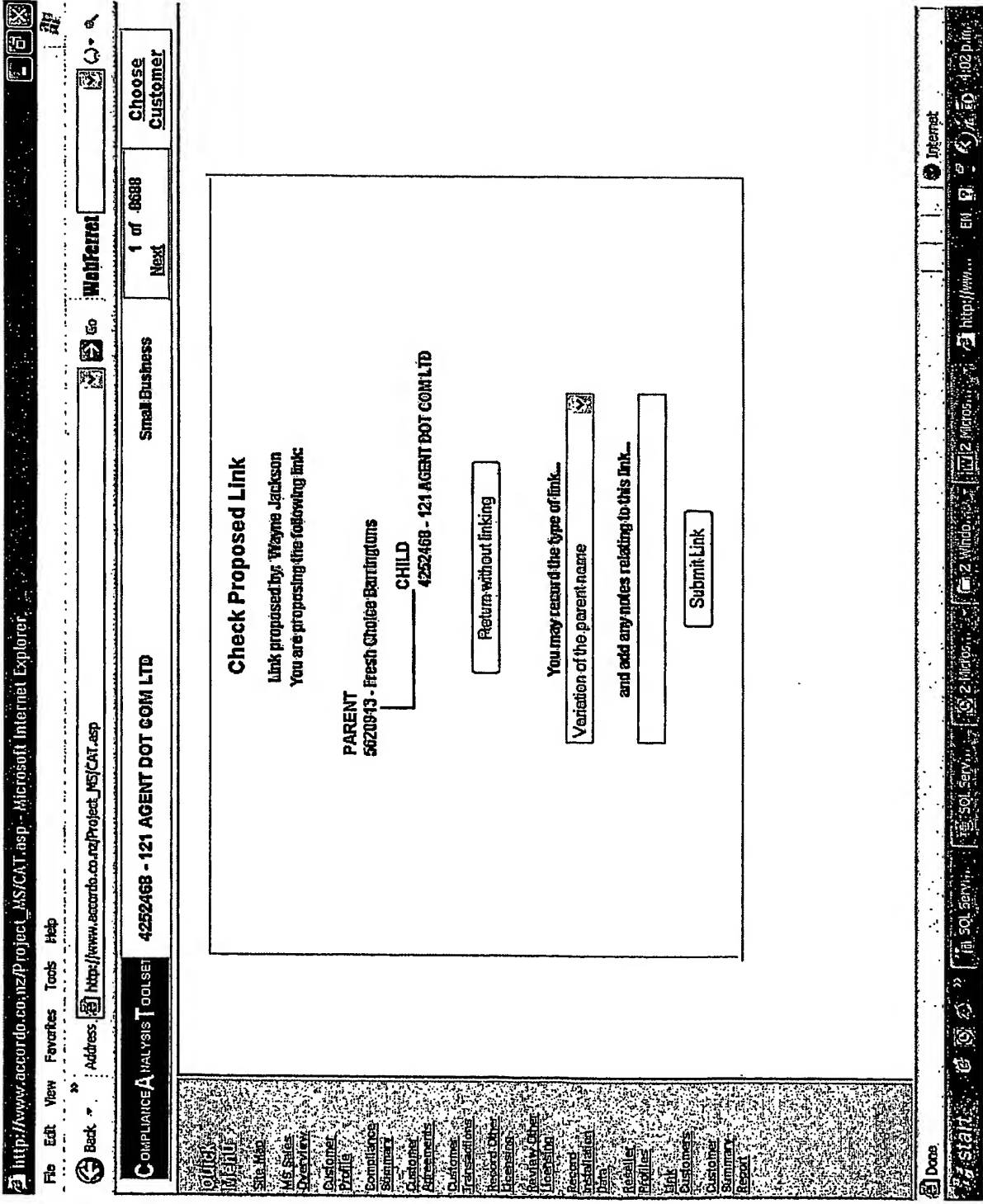


Figure 17

Agreement Modelling

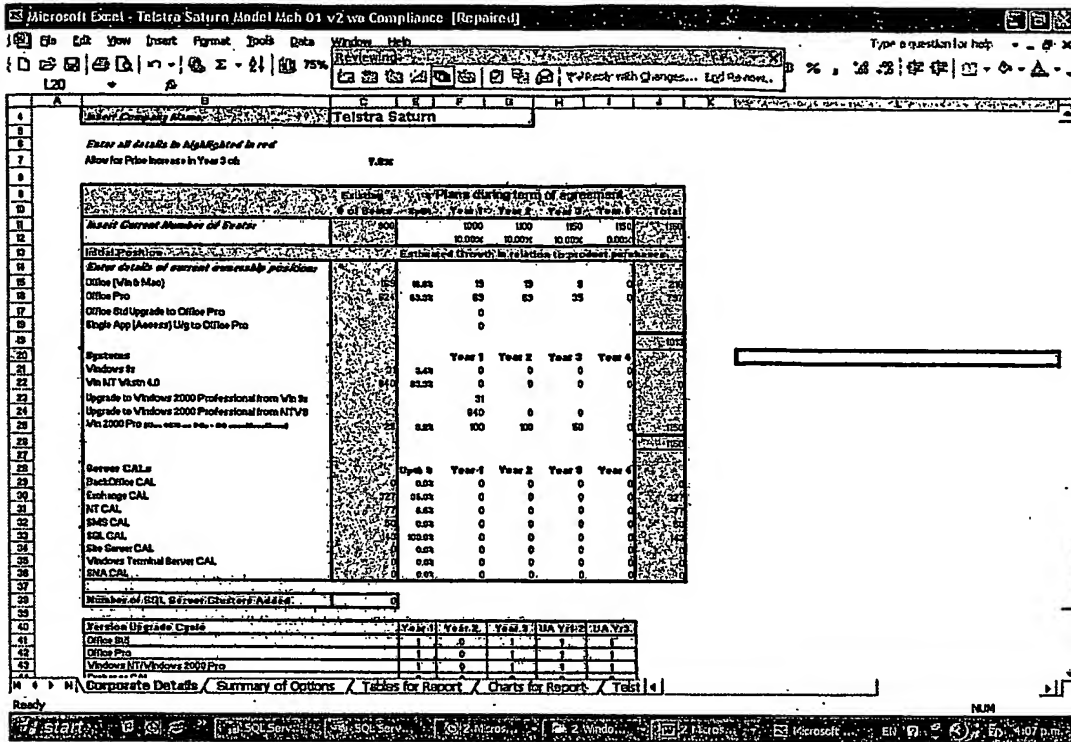


Figure 18A

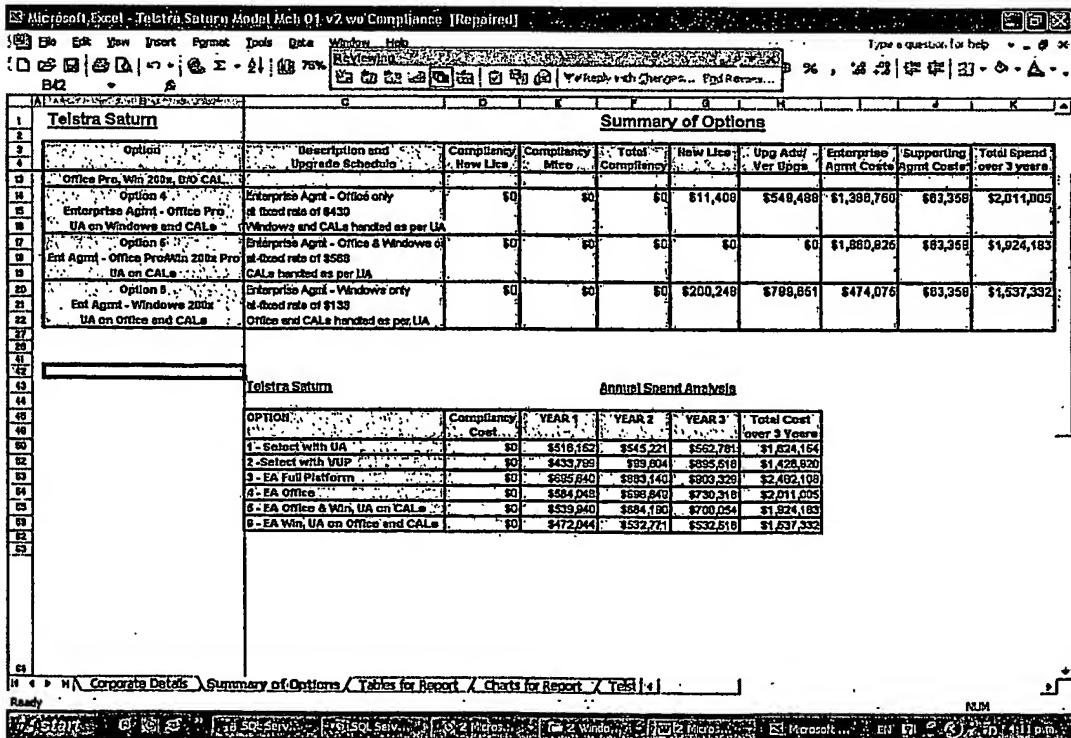


Figure 18B

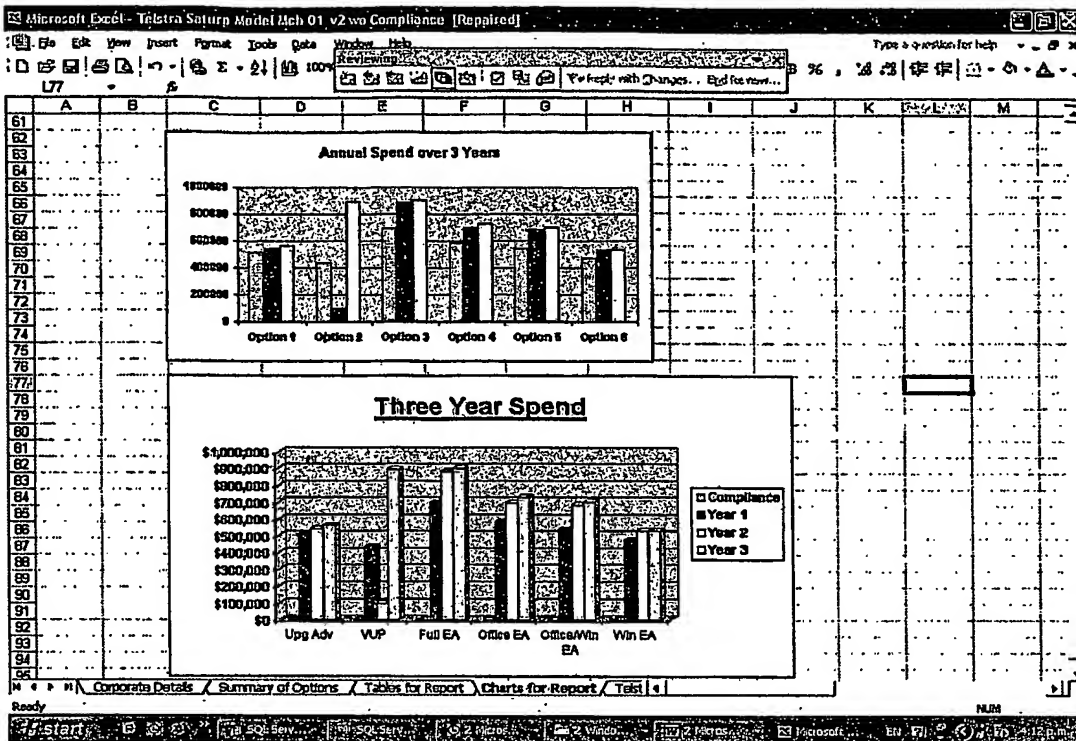


Figure 19A

Microsoft Excel - Telstra Saturn Model Mch 01 v2 wo Compliance [Repaired]

Telstra Saturn

Total Number of Seats: 800

Percentage of Base Installed with Office Pro 78.0%

Percentage of Base Installed with Office Std 18.6%

Percentage of Base with Win NT Wkstn 92.5%

Outstanding Licenses - to be purchased

MS Product Code	Description	Qty Installed	Qty Owned	Qty Required	Price Per	Est Price
021-02027	Office 2000 Win32 English MVL	149	0	149	\$ 775.00	\$ 115,475.00
259-02409	Office Pro 2000 Win32 English MVL	624	71	553	\$ 931.00	\$ 514,843.00
078-01108	Project 2000 Win32 English VLP MVL	8	0	8	\$ 328.00	\$ 2,624.00
078-01151	Project 2000 Win32 English MVL	83	14	69	\$ 768.00	\$ 52,896.00
068-00187	Visio Standard 2000 Win32 English MVL	43	0	43	\$ 279.00	\$ 11,897.00
853-00253	Visual Studio Pro 6.0 Win32 English MVL			2	\$ 1,878.00	\$ 3,756.00
236-0742V40VL	WinNT Win98 4.0 English RUP MVL Win95/Win98			265	\$ 369.00	\$ 97,785.00
523-00305	Windows Pro 2000 English RUP MVL			27	\$ 308.00	\$ 8,316.00
391-00333	Exchange CAL 5.5 English MVL			277	\$ 112.00	\$ 31,024.00
312-00303	Exchange Svr 5.5 English MVL			1	\$ 694.00	\$ 694.00
359-00308	SQL CAL 2000 English MVL			8	\$ 303.00	\$ 2,424.00
228-00753	SQL Svr Standard Edn 2000 English MVL			7	\$ 1,379.00	\$ 9,653.00
2272075ZV40VL	WinNT CAL 4.0 English MVL			27	\$ 68.00	\$ 1,836.00
2273275ZV40VL	WinNT Svr 4.0 English MVL			10	\$ 1,229.00	\$ 12,290.00
Totals						\$869,878.00

Summary of Options / Tables for Report / Charts for Report / Telstra Compliance / Ziv

Figure 19B

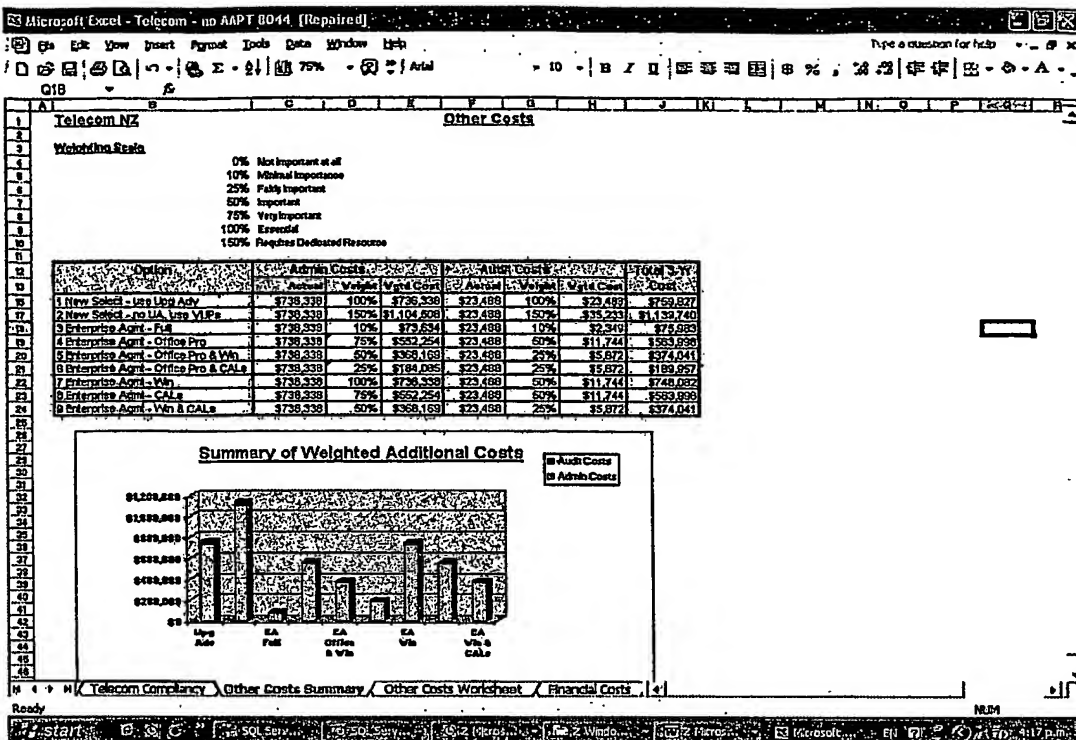


Figure 20A

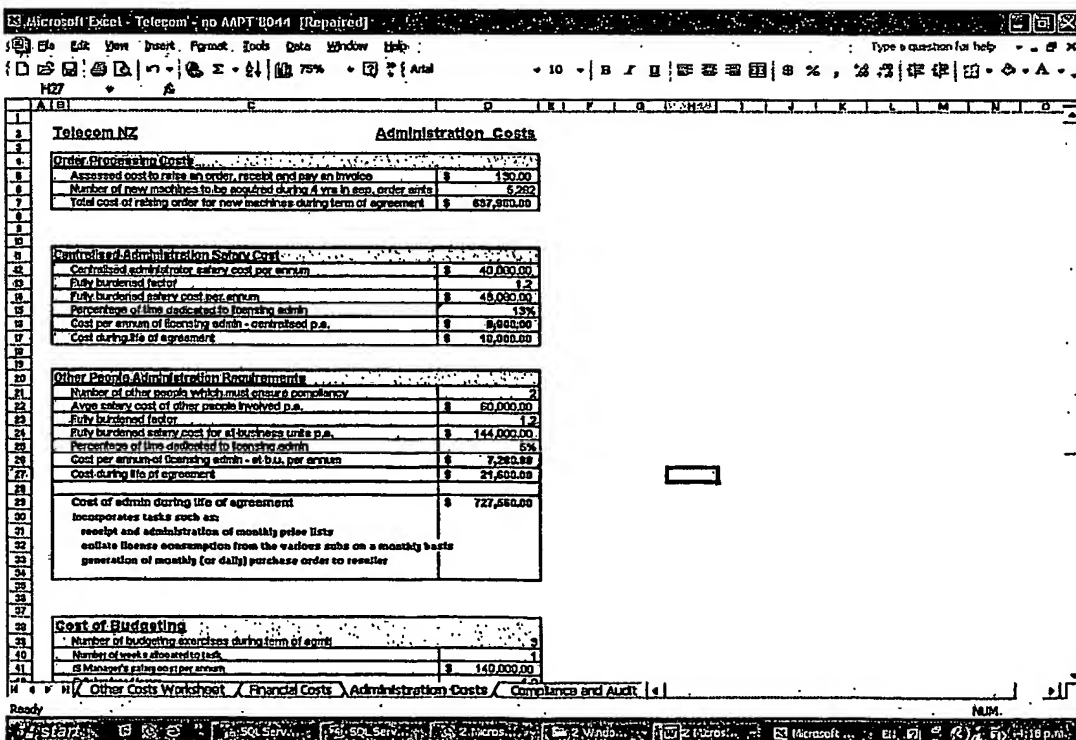


Figure 20B

Microsoft Excel - Telecom - no A421, B044 [Repaired]										
File Edit View Insert Format Tools Data Window Help										
100% - A -										
B53										
1	Telecom NZ	Purchase under V5 and use MVLP for UA and later Purchases								
2										
3	All prices quoted at retail for comparison								118.000%	
4										
5										
6	Upgrade Advantages / Products	Upgrade Adv	Openings							
7	Office Standard	\$472.00	6092	6092	6092	6092	6092	\$4,571,924	\$1,437,712	\$1,437,712
8	Office Professional	\$655.00	1952	1952	1952	1952	1952	\$1,753,579	\$551,440	\$551,440
9										
10	Windows 95/98	\$330.00	0	0	0	0	0	\$0	\$0	\$0
11	Windows NT Workstation	\$330.00	8044	8044	8044	8044	8044	\$4,220,687	\$1,327,260	\$1,327,260
12										
13	BackOffice Client Access	\$239.00	0	0	0	0	0	\$0	\$0	\$0
14	Windows 2000 Client Access	\$41.00	1243	8044	8044	8044	8044	\$524,388	\$164,902	\$164,902
15	Exchange Client Access	\$91.00	551	8044	8044	8044	8044	\$1,163,885	\$366,002	\$366,002
16	SMS Client Access	\$57.00	0	0	0	0	0	\$0	\$0	\$0
17	SQL Server Client Access	\$197.00	650	2011	2011	2011	2011	\$529,906	\$198,084	\$198,084
18	SNA Server Client Access	\$61.00	0	0	0	0	0	\$0	\$0	\$0
19										
20				6092		6092		\$12,684,370	\$4,645,400	\$4,645,400
21										
22	New Purchases / Products									
23	Office Standard	\$635.00	0	0	0	0	0	\$0	\$0	\$0
24	Office Professional	\$836.00	0	0	0	0	0	\$0	\$0	\$0
25	Office Std U/g to Office Pro	\$163.00	0	0	0	0	0	\$0	\$0	\$0
26	Single App (Access) U/g to Office Pro	\$361.00	0	0	0	0	0	\$0	\$0	\$0
27										
28	Windows NT Workstation upgrade	\$339.00	8044	0	0	0	0	\$0	\$0	\$0
29										
30										
31										
32	BackOffice Client Access PUP from BOC	\$251.00	0	0	0	0	0	\$0	\$0	\$0
33	BackOffice Client Access PUP non SQL	\$314.00	0	0	0	0	0	\$0	\$0	\$0
34	General Work at Home V5 & UA V5 & VLPs OLP (Do Nothing) EA Full Rat EA Full 14									

Figure 21

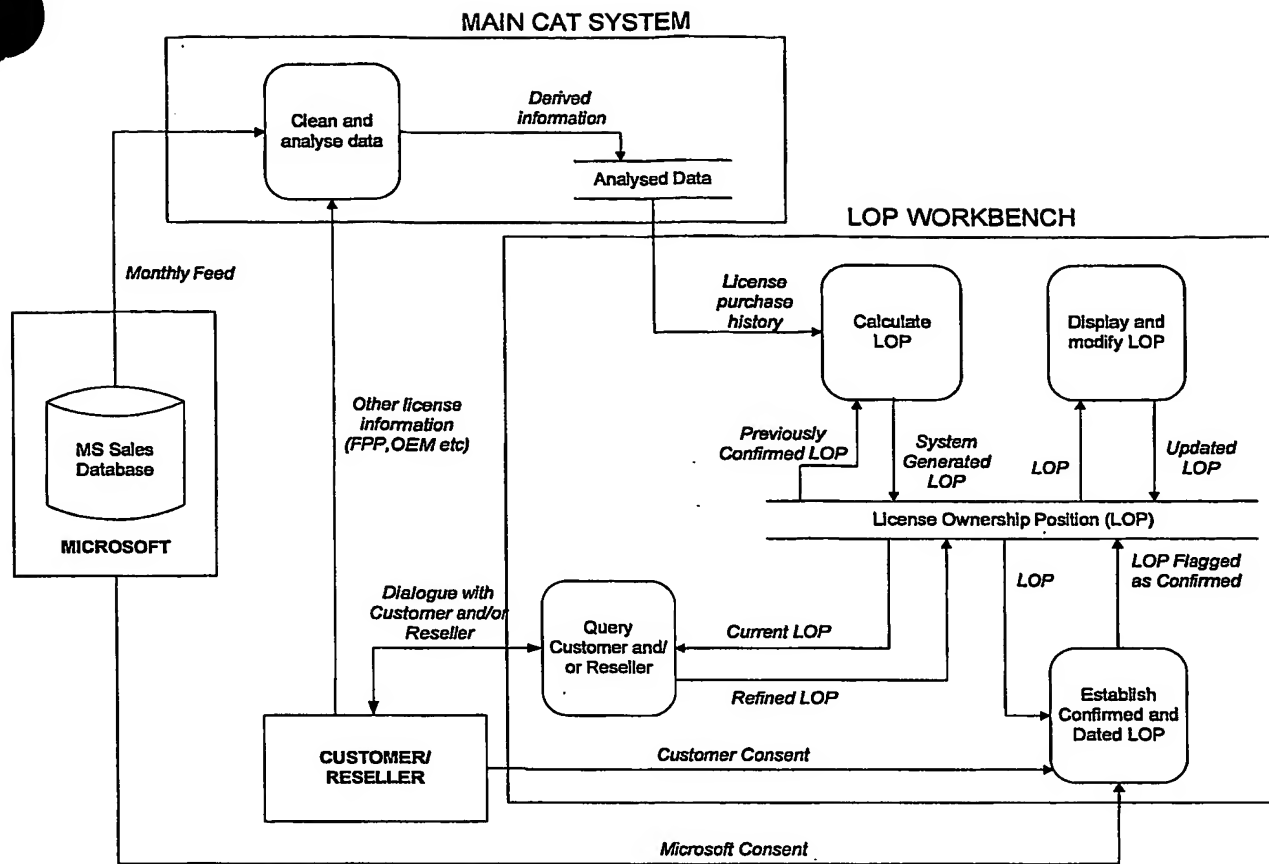


Figure 22

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☒ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.